

ABSTRACT

The present invention provides for novel methods of sample preparation and analysis involving reproducibly reducing the complexity of a nucleic sample. The invention further provides for analysis of the above sample by hybridization to an array which may be specifically designed to interrogate the desired fragments for particular characteristics, such as, for example, the presence or absence of a polymorphism. The invention further provides for novel methods of using a computer system to model enzymatic reactions in order to determine experimental conditions before conducting actual experiments.

1. A method of sample preparation and analysis, comprising:
a) reducing the complexity of a nucleic sample;
b) hybridizing the reduced complexity sample to an array;
c) interrogating the array for particular characteristics;
d) using a computer system to model enzymatic reactions;
e) determining experimental conditions before conducting actual experiments.